### **ASX Announcement**

**Barton Gold** 

8 September 2025

# 'Stage 1' Resources at Central Gawler Mill Pass 300koz Au

Feasibility studies to begin shortly | Targeting operations by end of 2026

### **HIGHLIGHTS**

Challenger JORC (2012) Mineral Resources Estimate (MRE) grows to 313koz Au (10.6Mt @ 0.92 g/t), incl. 194koz Au (1.87Mt @ 3.23 g/t) in existing open pit and underground mines:

Challenger Main Open Pit: 70,000oz Au (0.65Mt @ 3.36 g/t Au); Challenger West Open pit: 11,600oz Au (0.03Mt @ 10.7 g/t Au); Challenger Underground (above 215mRL): 89,400oz Au (0.98Mt @ 2.84 g/t Au); and Challenger Deeps (below 90mRL): 23,000oz Au (0.21Mt @ 3.50 g/t Au).

- Almost all MRE mineralisation located in, on, or adjacent to, existing serviceable open pit and underground development → opportunities for low-cost access and production
- Preliminary estimate for full reinstatement of 600ktpa Central Gawler Mill only A\$26m (± 30%)<sup>1</sup>
- Targeting lower-cost, de-risked two phase transition to operations, with initial high-grade tailings reprocessing (as Phase 1), followed by restart of fresh rock operations (as Phase 2)
- Technical programs moving directly to definitive Feasibility, targeting operations by end of 2026; conversations underway with financiers for low-dilution credit financing options

Barton Gold Holdings Limited (ASX:BGD, FRA:BGD3, OTCQB:BGDFF) (Barton or Company) is pleased to announce an updated MRE for its South Australian Challenger Gold Project (Challenger). This follows detailed remodelling of gold mineralisation on or near existing development drives within the historical Challenger underground mine (below the 900mRL level). This mineralisation was temporarily removed from Barton's recent 30 June 2025 Challenger MRE update, pending final remodelling and re-estimation.<sup>2</sup>

### Commenting on the Challenger JORC Resources update, Barton MD Alexander Scanlon said:

"With gold Resources of over 300,000oz now confirmed adjacent to the Central Gawler Mill, the pieces are now in place for the startup of an initial multi-year 'Stage 1' operation. This represents a significant opportunity for Barton to join a select few of its peers by transitioning to operations at a period of record high gold prices.

"Our fully permitted Central Gawler Mill also offers considerable leverage in successfully delivering this outcome, with a potentially shorter, lower-cost, and lower-risk pathway to operations and BGD's re-rating to 'producer' status. A successful outcome could then generate revenues and cash flow to fund our planned regional growth.

"We are now moving directly to definitive Feasibility studies targeting a two phase, de-risked development and the start of initial 'Stage 1' operations by the end of 2026. Barton has a very exciting 18 months ahead as we navigate this next stage of our corporate evolution."

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<sup>&</sup>lt;sup>1</sup> Refer to ASX announcement dated 21 July 2025

<sup>&</sup>lt;sup>2</sup> Refer to ASX announcement dated 30 June 2025

### **Updated Challenger JORC (2012) MRE**

The new Challenger MRE reflects the original and adjacent 'SEZ pit' open pits (**Challenger Main**), the 'West' open pit (**Challenger West**), the 'South Southwest' Deposit (**CSSW**), historical Tailings Storage Facilities 1 and 2 (**TSF1** and **TSF2**, respectively) and the historical Challenger underground mine (**UG**).<sup>3</sup>

All mineralisation is adjacent to the Company's Central Gawler Mill (**CGM**). The updated MRE excludes various lower-grade stockpiles and higher-grade mill residuals (eg. ball mill rejects) which are located on the Run of Mine (**ROM**) pad. These materials will likely form a component of early mill feed as the hard rock crushing and grinding circuits are recommissioned for the start of Phase 2 (fresh rock) operations.

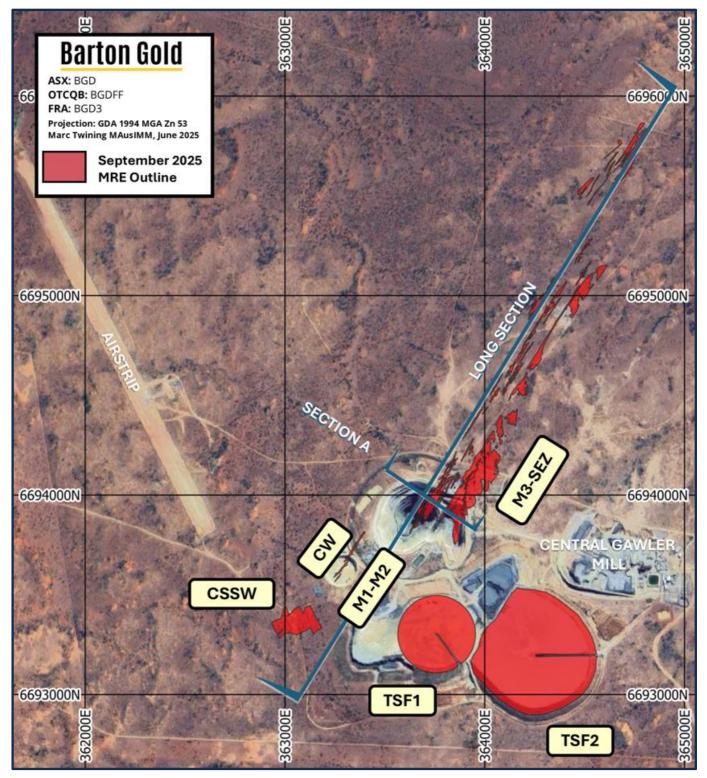


Figure 1 - Challenger site map with locations of key infrastructure and JORC (2012) MRE deposits

<sup>&</sup>lt;sup>3</sup> Refer to Prospectus dated 14 May 2021

### Comparison with prior Challenger JORC (2012) MRE

The updated Challenger JORC (2012) MRE is shown in Table 1 below, and represents the re-addition of the majority of Challenger UG mineralisation which was temporarily excluded from a June 2025 MRE update.<sup>4</sup> UG mineralisation has now been re-estimated down to 215mRL, and below 90mRL (Challenger Deeps).

Zone	Indicated				Inferred		TOTAL		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Challenger Main Open Pit	0.17	2.69	14.8	0.48	3.61	55.2	0.65	3.36	70.0
Challenger Underground (above 215mRL)			-	0.98	2.84	89.4	0.98	2.84	89.4
Challenger Deeps (below 90mRL)			-	0.21	3.50	23.0	0.21	3.50	23.0
Challenger West open pit				0.03	10.7	11.6	0.03	10.7	11.6
Challenger SSW Deposit				0.40	0.95	12.2	0.40	0.95	12.2
Tailings Storage Facility 1	3.19	0.54	55.5				3.19	0.54	55.5
Tailings Storage Facility 2	5.13	0.31	51.8				5.13	0.31	51.8
TOTAL	8.49	0.45	122	2.09	2.84	191	10.6	0.92	313

<sup>\*</sup> Totals subject to rounding; tonnages are dry metric tonnes; all Mineral Resources classified as 'Inferred' are approximate; cut-off grades applied are 2.0 (Deeps) 1.0 g/t Au (UG above 215 mRL), 0.5 g/t Au (Main Open Pit, Challenger West, SSW) and 0.0 g/t Au (TSF1 and TSF2).

Table 1 - Challenger JORC (2012) Mineral Resources Estimate (September 2025)

The prior Challenger JORC (2012) MRE (see Table 2) reported two months ago, on 30 June 2025, was: <sup>5</sup>

Zone	Indicated				Inferred		TOTAL		
	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au	Mt	g/t Au	Koz Au
Challenger Main Open Pit	0.17	2.69	14.8	0.47	3.64	54.8	0.64	3.39	69.6
Challenger Underground (1,000 – 900mRL)				0.17	3.98	21.9	0.17	3.98	21.9
Challenger West open pit				0.03	10.6	11.6	0.03	10.6	11.6
Challenger SSW Deposit				0.40	0.95	12.2	0.40	0.95	12.2
Tailings Storage Facility 1	3.19	0.54	55.5				3.19	0.54	55.5
Tailings Storage Facility 2	5.13	0.31	51.8				5.13	0.31	51.8
TOTAL	8.49	0.45	122.1	1.07	2.92	100.5	9.56	0.72	222.5

<sup>\*</sup> Totals subject to rounding; tonnages are dry metric tonnes; all Mineral Resources classified as 'Inferred' are approximate; cut-off grades applied are 1.0 g/t Au (Challenger U/G), 0.5 g/t Au (Challenger Main Open Pit, Challenger West, SSW) and 0.0 g/t Au (TSF1 and TSF2).

Table 2 – Challenger JORC (2012) Mineral Resources Estimate (June 2025)<sup>4</sup>

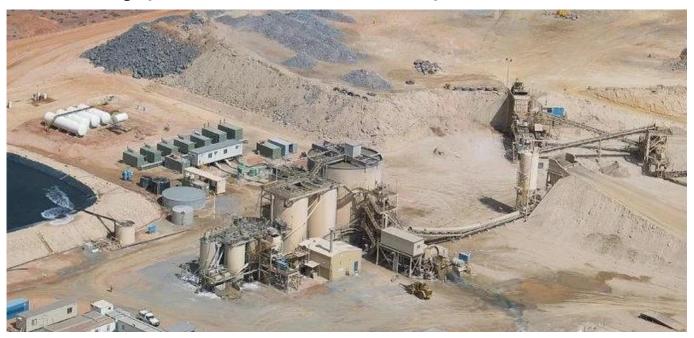


Figure 2 - Challenger site during historical operations (Central Gawler Mill at centre)<sup>4</sup>

 $<sup>^4</sup>$  Refer to ASX announcement dated 30 June 2025

<sup>&</sup>lt;sup>5</sup> Refer to Prospectus dated 14 May 2021

### **Challenger Main, Challenger West & SSW**

The JORC (2012) MREs for the Challenger Main, Challenger West and SSW Deposits are based upon historical drilling data assuming open pit mining to a maximum depth of ~200m (1000mRL level). UG mineralisation has now been re-estimated down to 215mRL, and then below 90mRL (**Challenger Deeps**).

Almost all of the underground mineralisation in the updated MRE is located on, or adjacent to, existing serviceable development and ore drives, presenting an opportunity for low-cost access and production.

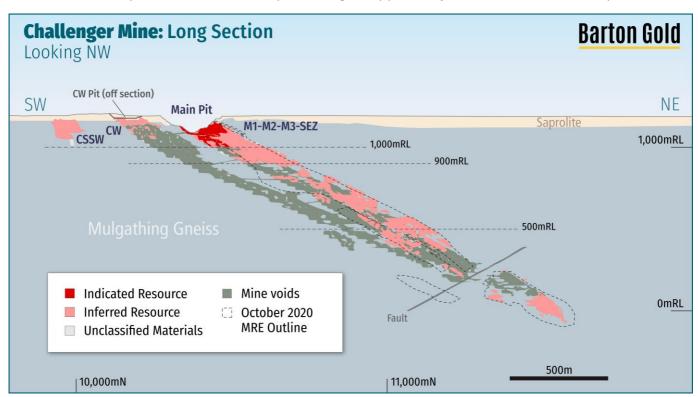


Figure 3 - Challenger Main (M1 - M3 & SEZ lodes visible), West (CW) and SSW (CSSW) long section

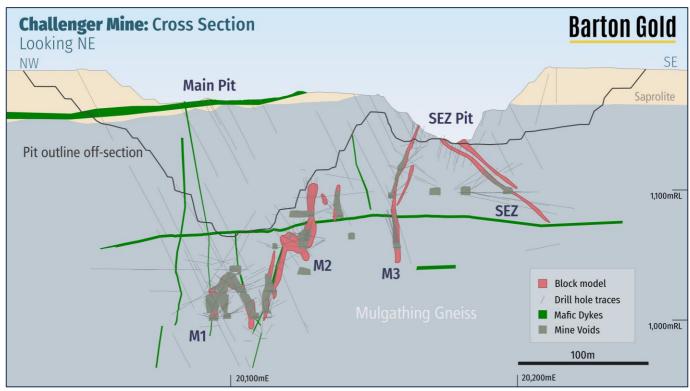


Figure 4 - Challenger Main cross section showing M1 - M3 lodes and SEZ (Section A on Figure 1)<sup>6</sup>

 $<sup>^{\</sup>rm 6}$  Refer to ASX announcement dated 30 June 2025

### **Tailings Storage Facilities (TSFs)**

### **Tailings Storage Facility 1**

Tailings Storage Facility 1 (**TSF1**) has been identified as an attractive reprocessing opportunity. TSF1 serviced the highest grade open pit and underground operations in the Challenger Main Open Pit and Underground. Metallurgical testwork indicates these materials to be coarse, with a grain size of up to 225 $\mu$ m instead of the design target size of 75 $\mu$ m, resulting in a peripheral ring of higher-grade materials with potential recoveries of 65-70% via regrinding to 38 $\mu$ m, or 75–80% via high-efficiency fine grinding.

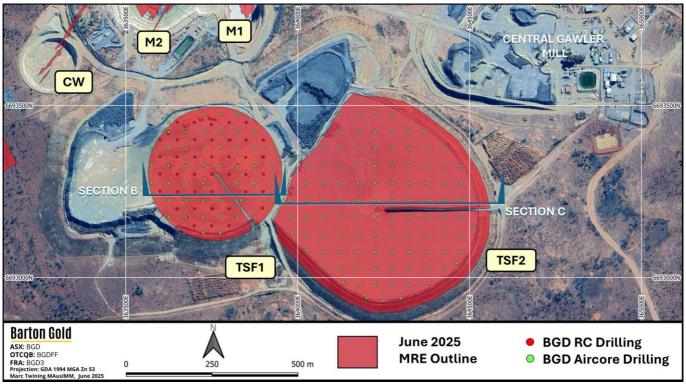


Figure 5 - Challenger TSFs plan map showing collar locations for validation drilling<sup>7</sup>

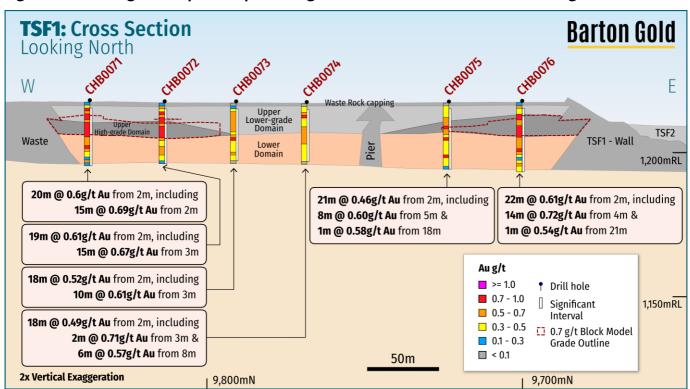


Figure 6 - Section B (Fig 5) showing higher-grade peripheral TSF1 materials & 0.7g/t Au grade shell

 $<sup>^{7}</sup>$  Refer to ASX announcement dated 30 June 2025

### Low-cost pathway to operations, feasibility expedited

During mid-2025 Barton engaged Ammjohn Solutions (**Ammjohn**) to review reinstatement of the CGM to its original 600ktpa design capacity (fresh ore basis), leveraging existing infrastructure and recommending potential enhancements to improve gold recovery and operational efficiency for subsequent review.<sup>8</sup>

Preliminary engineering analysis has confirmed that full reinstatement of the Central Gawler Mill (**CGM**) to its original 600ktpa fresh ore configuration is estimated at only  $A$26m (\pm 30\%)$ , including (among others) upgrades to mill motors, automation and a new pre-leach thickener to improve efficiency.<sup>8</sup> During the period from 2002 - 2018, the CGM produced ~1.2Moz of gold with average gold recoveries of 94 - 95%.<sup>9</sup>

There may also be, in the case of tailings reprocessing, opportunity to defer capital cost elements to a later date (such as crushing, grinding and gravity circuit refurbishment and upgrades).<sup>8</sup> This could have the effect of reducing up-front capital requirements for the first 12 – 24 months of operation, with such works funded from operating cashflow and before fresh ore supplies enter the mill feed schedule.<sup>8</sup>

Barton is currently tendering definitive Feasibility studies to be completed during the end of calendar year 2025 and early calendar year 2026, with an objective to start initial 'Stage 1' CGM operations by the end of 2026. It is anticipated that definitive Feasibility studies will focus on initial tailings reprocessing ('Phase 1'), with the subsequent integration of fresh ore feed from open pit and underground mining ('Phase 2').



Figure 7 - 3D schematic indicating CGM component replacement and refurbishment8

The process design criteria applied to the refurbishment estimate (fresh ore basis) include:<sup>8</sup>

Parameter*	Units	Fresh Ore
Annual throughput rate	tpa	600,000
Crushing / grinding feed rates	tph	81 / 71
Available leach & adsorption residence time	h	56.8
Average feed grade	g/t Au	2.50
Average metallurgical recovery <sup>2</sup>	%	94%

<sup>\*</sup> Note: the information presented in this announcement does not constitute a production target as defined under the ASX Listing Rules or the JORC Code (2012).

Table 3 - Central Gawler Mill reinstatement process design criteria<sup>8</sup>

 $<sup>^{\</sup>rm 8}$  Refer to ASX announcement dated 21 July 2025

<sup>&</sup>lt;sup>9</sup> Refer to Prospectus dated 14 May 2021

### **Updated Company JORC Mineral Resources Statement**

TOTAL

Further to the updated MRE detailed in this announcement:\*

- Barton's total JORC (2012) Mineral Resources gold endowment is now 2.23Moz (79.9Mt @ 0.87 g/t Au); and
- Barton's total JORC (2012) Mineral Resources silver endowment is now 3.1Moz (34.5Mt @ 2.80 g/t Au).

Gold JORC Resources	Zone		Indicated		_	Inferred			TOTAL	
Project		MT	g/t Au	koz Au	MT	g/t Au	koz Au	MT	g/t Au	koz Au
Tunkillia (100%)*	Area 223 Oxide	0.73	1.09	26	0.53	0.72	12	1.26	0.93	38
	Area 223 Transitional	3.13	1.07	108	3.70	0.77	92	6.83	0.91	200
	Area 223 Fresh	25.6	0.89	733	20.7	0.72	479	46.3	0.81	1,212
	Area 51 Oxide				0.19	0.86	5	0.19	0.86	5
	Area 51 Transitional				1.45	0.64	30	1.45	0.64	30
	Area 51 Fresh	1.11	0.80	29	5.81	0.53	99	6.92	0.57	128
	Total Tunkillia	30.6	0.91	896	32.4	0.69	717	62.9	0.80	1,612
Tarcoola (100%)*	Perseverance Mine Oxide				0.00	0.62		0.00	0.62	0
	Perseverance Mine Transitional	0.01	1.34	0	0.01	1.00	0	0.01	1.14	1
	Perseverance Mine Fresh	0.18	2.12	12	0.11	1.89	7	0.30	2.03	19
	Stockpiles Oxide				0.17	1.20	7	0.17	1.20	7
	Stockpiles Fresh				0.06	1.40	3	0.06	1.40	3
	Total Tarcoola	0.19	2.10	13	0.35	1.48	17	0.54	1.70	30
Challenger (100%)*	Challenger Main Open Pit	0.17	2.69	15	0.48	3.61	55	0.65	3.36	70
	Challenger Underground (above 215mRL)				0.98	2.84	89	0.98	2.84	89
	Challenger Deeps (below 90mRL)				0.21	3.50	23	0.21	3.50	23
	Challenger West Open Pit				0.03	10.7	12	0.03	10.7	12
	SSW Deposit				0.40	0.95	12	0.40	0.95	12
	Tailings Storage Facility 1	3.19	0.54	56				3.19	0.54	56
	Tailings Storage Facility 2	5.13	0.31	52				5.13	0.31	52
	Total Challenger	8.49	0.45	122	2.09	2.84	191	10.6	0.92	313
Wudinna (100%)*	Barnes	0.44	1.30	18	2.19	1.60	116	2.63	1.58	134
	White Tank				0.33	1.50	16	0.33	1.50	16
	Baggy Green				2.12	1.40	96	2.12	1.40	96
	Clarke				0.73	1.40	33	0.73	1.40	33
	Total Wudinna	0.44	1.27	18	5.37	1.51	261	5.81	1.50	279
TOTAL		39.7	0.82	1,049	40.2	0.92	1,186	79.9	0.87	2,234
Silver JORC Resources	Zone		Indicated			Inferred			TOTAL	
Project		MT	g/t Ag	koz Ag	MT	g/t Ag	koz Ag	MT	g/t Ag	koz Ag
Tunkillia (100%)*	Area 223 Oxide				1.24	1.10	40	1.24	1.10	40
	Area 223 Transitional				5.32	1.30	230	5.32	1.30	230
	Area 223 Fresh				28.0	3.10	2,800	28.0	3.10	2,800
TOTAL					24 E	2.00	2.070	24 E	2.00	2.070

Figure 8 - Barton updated JORC Gold & Silver Mineral Resources Estimates (September 2025)\*

\* Tables show the complete JORC MRE for each Project. Figures are subject to rounding, tonnages are dry-metric tonnes, and all Mineral Resources classified as 'Inferred' are approximate.

Gold cut-off grades applied are:

#### <u>Tunkillia</u>

- 0.3 g/t Au (Area 223)
- 0.3 g/t Au (Area 51)

#### <u>Tarcoola</u>

- 0.5 g/t Au (Perseverance Pit)
- 0.4 g/t Au (Stockpiles)

#### <u>Challenger</u>

- 0.5 g/t Au (Main, West & SSW)
- 1.0 g/t Au (Main UG)
- 2.0 g/t Au (Deeps)
- 0.0 g/t Au (TSF1 & TSF2)

#### Wudinna

• 0.5 g/t Au (all Deposits)

Silver is considered as a by-product and is reported as a subset of the reported gold MRE, and has only been reported where the block model reports >0.3g/t Au.

Silver resources are reported only as Inferred resources independent of the block model classification for gold. Mineral Resources are reported using a gold price of A\$3,500 / ounce.

Refer to Prospectus and ASX announcements dated 14 Oct 2021, 26 Apr 2023, 1 Sep 2023, 11 Dec 2023, 4 Mar 2024, 3 Jul 2024, and 4 Mar / 30 Jun / 2 Jul / 8 Sep 2025 for further details of JORC (2012) Mineral Resource Estimates and Barton's JORC (2012) Mineral Resources inventory.

2.80

3.070

### Mineral Resource Estimate for the Challenger Deposit (above 215 Fault, ~215 m RL), South Australia

#### **SUMMARY**

The Challenger gold deposit, mined as an open pit and underground operation between 2002 and 2018 and producing ~1.2 Moz gold, is located in the Gawler Craton, South Australia. It is ~730 km northwest of Adelaide, South Australia and ~130 km northwest of Tarcoola, South Australia.

The Project is owned by Barton Gold Holdings Ltd (BGD) and comprises the Challenger Mine, ~650 ktpa mill/processing plant ("Central Gawler Mill"), mine camp and associated infrastructure. The Challenger gold deposit was discovered in 1995 by Dominion Mining.

The deposit is hosted within high-grade metamorphic rocks and is characterised by structurally controlled quartz veins.

The resource (Table 1) is reported above a depth of 1,000 m RL and above a 0.5 g/t gold cut off. 1,000 m RL is approximately 200 m below the surface and 60 to 70 m below the pit floor. Below 1,000 m RL to a modelled to the 215 Fault (~215 mRL) the resource is reported above a 1.0 g/t cut off.

	Resource				
Cut off	Category	Area	Tonnes	Grade (Au g/t)	Au koz
> 0.5 g/t	Indicated	M1, M2, M3 lodes	121,000	2.80	10.9
above 1000 m RL		SEZ lodes	50,000	2.44	3.9
	Inferred	M1, M2, M3 lodes	379,000	3.97	48.4
		SEZ lodes	97,000	2.17	6.8
		Challenger West	34,000	10.7	11.6
		Challenger SSW	398,000	0.95	12.2
> 1.0 g/t Below	Inferred	M1, M2, M3 lodes	582,000	3.23	60.5
1,000 m RL		SEZ lodes	359,000	2.08	24.0
		Challenger West	37,000	4.16	4.9
Total			2,057,000	2.77	183

<sup>\*</sup> Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

Table 1. Challenger Mineral Resource Estimate September 2025

In addition to the above resources (Table 1) are two tailings storage facilities (TSF) on the leases; An indicated mineral resource for the tailings storage facility is reported (no cut off, Table 2) as it is envisaged hydraulic mining (no selectivity) will be used.

Indicated Material	tonnes (Mt)	Grade (Au g/t)	Au koz
TSF1	3.19	0.54	55.5
TSF2	5.13	0.31	51.8
Total	8.33	0.40	107.3

<sup>\*</sup> Due to rounding to appropriate significant figures, minor discrepancies may occur, tonnages are dry metric tonnes. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

Table 2. Challenger TSF Mineral Resource Estimate June 2025

### **GEOLOGY AND GEOLOGICAL INTERPRETATION**

Gold mineralisation at the Challenger deposit is hosted within granulite facies gneisses and is predominantly associated with deformed quartz veins. The mineralisation is structurally controlled, occurring as high-grade shoots that plunge steeply within narrow lodes. These lodes occupy the limbs and hinge zones of a tightly deformed, isoclinal fold package approximately 500 metres in width, comprising multiple subparallel lodes.

Inferred resource have less geological confidence than Indicated resources and should not have modifying factors applied to them. It is reasonable to expect that with further exploration most of the inferred resources could be upgraded to indicated resources.

The deposit is located within the meta-sedimentary Christie Gneiss (2,650 Ma) within the Mulgathing Complex, part of the north-western Gawler Craton. Peak metamorphism occurred around 2,440 Ma. The presence of invisible gold in löllingite and not in adjacent arsenopyrite and the presence of spherical gold sulphide inclusions in peak metamorphic garnet and other silicates suggest an earlier mineralising event. The absence of typical alteration halos, which usually signal younger fluid-driven mineralisation, further strengthens the case for a pre-metamorphic gold event.

### **Structural Modelling and Tailings Characterisation**

Building upon the work of previous tenement holders, a structural domain model of the Challenger Deposit was developed in Leapfrog software, reflecting the geometry of steeply plunging folds. Lodes were modelled using a combination of implicit 'vein style' and 'intrusion style' geometries. The shapes were constructed using explicit selection of drillhole intervals based primarily on grade, with a 0.5 g/t lower cutoff. The more complex shapes such as M1 and parts of M2 used manually digitised meshes corresponding with the central plane of each lode to generate structural trends (including the strong 30o -> 060 plunge component) that the implicit modelling could honour.

The high variability in assays required that selected intervals for modelling commonly had to incorporate samples below the cut-off grade in order to maintain continuity. In the M1-M2 lodes it was recognised that face sampling in particular was a poor representation of actual grade, and these samples were not directly utilised to control shapes. In M3 and SEZ, only face samples that were roughly perpendicular to and captured width of the lode were used as shape controls, with lode-parallel wall samples being both unreliable as samples and also adding too much complexity to the modelling process.

Tailings volume estimations were derived from surveyor records. TSF1 hosts a higher-grade outer ring in the upper part of the dam ("beach" facies), with gold grades exceeding 0.7 g/t Au, while the inner upper and lower layers ("pond facies") range between 0.3 and 0.5 g/t Au. The lower proportion of TSF2 exhibits grades broadly consistent with the lower-grade material from the central upper part of TSF1 and is overlain by tailings with approximately 0.2 g/t Au.

TSF1 is comprised entirely of material derived from the processing of Challenger mine ore, whilst the upper 3 m of TSF2 represents co-processing of material derived from both the Challenger mine and the Perseverance mine at Tarcoola, located approximately 130 km to the SE of the Challenger mine.

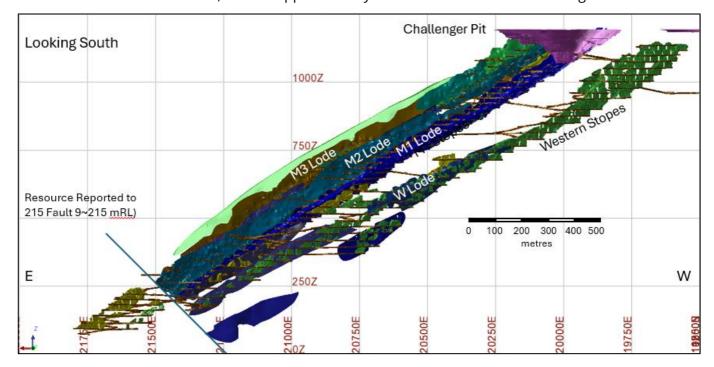


Figure 1. Challenger Gold Mine (looking south)

### **DRILLING TECHNIQUES**

Multiple drilling techniques and contractors have been used at the Challenger Project. The project has over 3,260 surface RC holes, 2,320 Underground diamond holes, 20,210 Sludge holes, 20,427 face samples and 18,989 wall samples. Face (Chip) sampling is stored as pseudo drill holes in the drill hole database making it easily combined with the diamond and sludge drilling data.

Core Drilling is widely spaced and often clustered around underground drill cuddies. Sludge and Face sampling are more prevalent and vary from 3 m spacing to 10 m along strike, Wall samples were not used in the MRE. Careful consideration was given to the benefits and vagaries of using fewer representative samples (UDDH) compared to the use more data of a lessor quality (including face and sludge samples). The use of the larger data set provides maximum data for the grade interpolant, with face and sludge data bringing a substantial improvement to data coverage particularly in the central, high grade parts of the lodes, however, the face and sludge data are not considered representative samples and are not supported by important quality controls data such as primary sample weights and field duplicates.

Near surface Exploration drilling undertaken by BGO followed suitable protocols including certified reference materials and duplicate sampling. BGD drilled the TSF's using both Aircore and RC drilling. (150 AC holes for 2,352.8 m and 120 RC holes for 2,804 m). Aircore and RC drilling data was used for the estimation of mineral resources in TSF1, whilst only AC drilling data is available for the estimation of resources in TSF2. Correlation analysis between AC and RC derived results from TSF1 confirmed the suitability of AC-derived assay data for resource estimation.

None of the drill hole locations of historical drill holes can be verified by Barton Gold as surface drill collars have been re-habilitated and there is limited underground access. No face or wall samples can be verified due to legacy mining issues.

### SAMPLING AND SUB-SAMPLING TECHNIQUES

All assay data used in the Challenger mine estimates has been analysed onsite using the commercial PAL1000 process. In brief this process involved Boyd crushing the sample (nominal 10 mm top size), rotary dividing a subsample of 400 g charge then pulverising the charge with steel media in a rotating steel flask along with a cyanide solution and leach accelerant in a batch of 52 samples within the PAL mill. The resulting slurry is subsampled (100 ml) and centrifuged to separate off a leachate which is then diluted and read on an AAS machine.

RC drilling by Barton Gold on TSF1 utilised a 5 ¾" (146 mm) face-sampling hammer, with a rig-mounted cone splitter attached to the cyclone providing one-metre sample intervals. AC drilling on the TSF utilised a 85mm diameter face-sampling blade bit, with all samples passed through a 3-tier riffle splitter at one-metre intervals.

### **QAQC**

Drilling from October 2006 was processed through the onsite PAL laboratory at Challenger Mine. The QAQC routine includes insertion of CRM, laboratory duplicates, and round robin assaying at independent laboratories. Sampling information (recovery, moisture, method) does not appear to have been recorded.

The Challenger 2017 Mineral Resource Estimate provides a summary QAQC report, covering the drilling between 2006-2017, no material issues were reported. Data pre-2006 is scarce and there appears to have been a poor handover of data prior to this time.

RC and Aircore drilling of the TSF used QAQC insertion rates of 1 blank per 50 samples, one cone splitter field duplicate per 50 samples, and 1 CRM per 50 samples. No significant issues were identified. Four RC twins of Aircore holes were drilled, and statistical analysis conducted on the overlapping data populations. Aircore drilling was deemed to be representative for the Challenger oxide material (TSF1 lower domain), aircore over-represented grade by 10% in the high-grade upper domain (TSF1 beach), and under-

represented grade by 10% in the low grade upper domain (TSF1 pond). The bias is likely a function of grain size and dill method.

### **ESTIMATION**

The geological interpretations are based on underground drill hole data and face sampling. Drill core and RC chip logging has been used to define the main geological units and weathering profile boundaries near surface. Numerous small mafic to ultramafic (lamprophyre) dykes cross-cut the deposit.

The resource estimate is estimated for gold only and does not take into account contained silver. Silver is a by-product and is not analysed. The host rock is not acid generating, and the deposit has only minor arsenopyrite or base metal sulphides. Metallurgical testing has shown there are no deleterious elements (Cu, Zn, Pb, Ni, Sb) of significance.

The Mineral Resource statement reported herein is a reasonable representation of the Challenger Project mineralisation, based on pit exposures, underground mapping (to the 600 Level) and current sampling data. Grade estimation was undertaken using Geovia's Surpac™ software package (v7.8.2). Ordinary Kriging ("OK") was selected for grade estimation.

Four block models are used to cover the Challenger study area and to align with the geometry of the modelled lodes (Challenger\_25.mdl, SEZone\_25.mdl, Ch\_WSW\_1.mdl and tailings\_1.mdl). The models are strike and dip aligned, improving the volumetric representation of the sub blocks. The selected block size  $(1 \times 10 \times 10, XYZ)$  is consistent with data configuration.

Informing samples were composited down hole to one metre intervals. Grade capping was applied to outlier composites. Grade caps applied to the Challenger deposit were assessed on an individual domain basis, caps ranged from 6 g/t up to 311 g/t. Six domains were capped at over 100gt/ (M1 311 g/t, M2-3 100 g/t, M2-4 205 g/t, M2-12 135g/, M2-14 214 g/t and M3-1 188 g/t. The Challenger west lode system has seven domains capped over 100 g/t, WS 132 g/t, WN 121g/t, W-11 100 g/t, W-2 262 g/t, W-3 167 g/t, W-5 170 g/t and W-6 139 g/t). M2 grades caps were around 50g/t and M3 was more commonly around 20 g/t increasing to 50 g/t in the deeper domains within the lode. TSF1 pond domain was capped at 0.82 g/t, the TSF1 beach was capped at 1.43 g/t, TSF2 was capped at 0.56. Experimental variograms were generated in Supervisor, Normal Scores transformations were applied to experimental variograms, modelled variograms were back transformed for use in Surpac. For domains where experimental variograms could not be created, the variogram models were orientated along strike and down dip, composite data was viewed in three dimensions and the plunge component incorporated into the variogram. Challenger variograms generally had short ranges (~30 m) while the TSF variograms had long ranges (~130 m). A twopass estimation process was employed, with the first pass requiring a minimum of either 4 or 8 composites and a maximum of between 8 and 18 composites depending on the size of the domain. The second pass (double the first pass) reduced the minimum composites required by half and the maximum of composites required by four-fifths. Search ellipse ranges for Challenger were 30 m above the 1000 mRL and 20 m below 1000 mRL where grade sludge drilling was more prevalent, the West and South-West were 50 m and for the TSF a search of 100 m was used. No second pass estimation was required on the TSF model. Anisotropic ratios ranged between 1:1.33 to 1:2.2 for the semi major axis, anisotropic rations or the minor axis ranged from 1:2 to 1:6.5, the TSF variograms produced the flattest ellipses.

Density values are assigned to blocks based on lithology and five weathering profiles; ranging from completely weathered (1.5 t/m3) to 2.72 t/m3 assigned to fresh material (historic records). The TSF model was assigned 1.5 t/m3 (average of 14 BGO samples) Open pits, underground development, stopes and dykes have been excluded from the resource classification.

Block model validation comprised visual checks in plan and section, global comparisons between input and output means and alternative estimation techniques.

#### **CUT-OFF GRADES**

The resource is reported above a 0.5 g/t gold grade and within 200 m of the surface (1,000 m RL), approximately 60 m to 70 m below the pit floor. Below 1,000 m RL the resource is reported down to 900 m RL above 1 g/t, reflecting an option to rehabilitate the existing workings and exploit the deposit from underground.

The following assumptions were considered.

Resource Cut Off Assumptions							
Item	Units	Value					
Gold Price	AU\$/oz	5,500					
Gold Price	AU\$/g	176.83					
Recovery	%	94					
Effective Revenue	AU\$/g	166.22					
Less Royalty	%	6.0					
Less per g Costs	AU\$/g	0.32					
Realised Revenue	AU\$/g	155.92					
Cost to Mine/t ore	AU\$/t	85.13					
Costs to Process (+G&A)	AU\$/t	43.50					
Cut-off (in place)	g/t	0.82					
Dilution	%	15					
Resource Cut-off Grade	g/t	0.95					

Deeper resources are reported above 1 g/t to reflect the increased cost of underground mining, a general mining cost of \$85/tonne was considered, other considerations remain consistent. The tailings material will likely be hydraulically mined, and as such will have no mining selectivity. Mining costs are assumed to be \$1.50/t and only regrind processing is considered (\$10/t).

#### **RESOURCE CLASSIFICATION**

No measured resources remain within the Challenger Deposit.

The Indicated Mineral Resource may be developed on a single level, providing there is reasonable evidence of the lode in development. The data density and quality are insufficient to fully define structural complexity or continuity. Specifically, 25-metre spaced diamond drilling lacks the resolution required to delineate metre-scale parasitic folding. The broader drill spacing complicates confident correlation of intercepts to specific segments of the mineralised system. The dataset typically comprises a 20 x 20 metre diamond drill grid, supplemented by 5 to 10 metre ring-spaced sludge drilling and face sampling at 3 to 4 metre intervals. This spatial configuration provides adequate confidence in the geological interpretation and grade continuity to support classification as Indicated, aligning with the JORC Code (2012) requirement that the nature, quality, and quantity of data are sufficient to assume geological continuity with reasonable confidence.

The TSF resource is classified as Indicated, based on a drill spacing of approximately 35 m x 35 m. Grade distribution approximates a normal curve with low coefficients of variation, consistent with the expected homogenisation resulting from grade-controlled mill feed followed by grinding and processing a slurry through the CIL plant.

The Inferred Mineral Resource is based on drill limited data extensive sludge and face samples, with limited underground development. While there is sufficient geological evidence to infer the presence of a lode structure, continuity cannot be reliably established due to variability of assay results and the absence of corroborating structural controls. Drill spacing is not systematically defined, and classification can be based on a single drill intercept or solely on sludge and face sampling, provided it can be reasonably interpreted as being part of a broader structure. Inferred Mineral Resources include areas of the model at depth that may be proximal to existing development and stopeing, and includes remnants, pillars, and

low-grade mineralisation, where there are reasonable prospects for eventual economic extraction, but an element of economic risk is associated accessibility. The Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that most of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration utilising improved sampling techniques., underground mapping and more time spent on specific areas that demonstrate economic potential by developing the interpretations to better understand the geological and grade distributions. Inferred Mineral Resources may be used in Scoping Studies.

#### MINING AND METALLURGICAL FACTORS

Barton Gold foresees mining via open pit and underground methods, followed by conventional grinding and leach recovery. The current Mineral Resource does not include any dilution or ore loss associated with practical mining constraints. The Challenger mineralisation sampled has been shown to be amenable to direct cyanidation for gold extraction. The Challenger Deposit was processed on site through the CIL plant between 2002 and 2018. Historical recoveries exceed 95% via gravity and CIL processing. No deleterious elements reported. Initial BGD test work on the tailing's material indicates that at a 70% recovery is achievable with a finer regrind (38  $\mu$ m).

### **ENVIRONMENTAL AND TENURE**

The Challenger Project, comprises two mine leases (ML 6103, ML 6457) and three Miscellaneous purposes licences (MPL 63, MPL 65, MPL 66)

The project operates under approved mining leases with current environmental permits. There are no known impediments to continued operations at the Challenger mine. The waste material is non-acid generating and will be stockpiled on site in designated waste dumps.

Mr I.A. Taylor BSc Hons (Geology), G.Cert.(Geostats), FAusIMM (CP) MAIG. Brisbane, Australia Date: 2 September 2025 Authorised by the Board of Directors of Barton Gold Holdings Limited.

For further information, please contact:

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### **Competent Persons Statements**

The information in this announcement that relates to Exploration Results for the Challenger Gold Project (including drilling, sampling, geophysical surveys and geological interpretation) is based upon, and fairly represents, information and supporting documentation compiled by Mr Marc Twining BSc (Hons). Mr Twining is an employee of Barton Gold Holdings Ltd and is a Member of the Australasian Institute of Mining and Metallurgy Geoscientists (AusIMM Member 112811) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr Twining consents to the inclusion in this announcement of the matters based upon this information in the form and context in which it appears.

The information in this announcement that relates to the new estimate of Mineral Resources for the Challenger Gold Project geological interpretation and resource estimates) is based upon, and fairly represents, information and supporting documentation compiled by Mr Ian Taylor BSc (Hons). Mr Taylor is an employee of Mining Associates Pty Ltd and has acted as an independent consultant on Barton Gold's Challenger Gold Project, South Australia. Mr Taylor is a Fellow and certified Professional of the Australian Institute of Mining and Metallurgy (FAusIMM (CP Geo) 110090) and has sufficient experience with the style of mineralisation, the deposit type under consideration and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr Taylor consents to the inclusion in this announcement of the matters based upon this information in the form and context in which it appears.

#### **About Barton Gold**

Barton Gold is an ASX, OTCQB and Frankfurt Stock Exchange listed Australian gold developer targeting future gold production of 150,000ozpa with **2.2Moz Au & 3.1Moz Ag JORC Mineral Resources** (79.9Mt @ 0.87g/t Au), brownfield mines, **and 100% ownership of the region's only gold mill** in the renowned Gawler Craton of South Australia.\*

### **Challenger Gold Project**

• 313koz Au + fully permitted Central Gawler Mill (**CGM**)

### Tarcoola Gold Project

- 20koz Au in fully permitted open pit mine near CGM
- Tolmer discovery grades up to 84g/t Au & 17,600g/t Ag

#### Tunkillia Gold Project

- 1.6Moz Au & 3.1Moz Ag JORC Mineral Resources
- Competitive 120kozpa gold & 250kozpa silver project

### **Wudinna Gold Project**

- 279koz Au project located southeast of Tunkillia
- Significant optionality, adjacent to main highway



#### **Competent Persons Statement & Previously Reported Information**

The information in this announcement that relates to the historic Exploration Results and Mineral Resources as listed in the table below is based on, and fairly represents, information and supporting documentation prepared by the Competent Person whose name appears in the same row, who is an employee of or independent consultant to the Company and is a Member or Fellow of the Australasian Institute of Mining and Metallurgy (**AusIMM**), Australian Institute of Geoscientists (**AIG**) or a Recognised Professional Organisation (RPO). Each person named in the table below has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he has undertaken to quality as a Competent Person as defined in the JORC Code 2012 (**JORC**).

Activity	Competent Person	Membership	Status
Tarcoola Mineral Resource (Stockpiles)	Dr Andrew Fowler (Consultant)	AusIMM	Member
Tarcoola Mineral Resource (Perseverance Mine)	Mr Ian Taylor (Consultant)	AusIMM	Fellow
Tarcoola Exploration Results (until 15 Nov 2021)	Mr Colin Skidmore (Consultant)	AIG	Member
Tarcoola Exploration Results (after 15 Nov 2021)	Mr Marc Twining (Employee)	AusIMM	Member
Tunkillia Exploration Results (until 15 Nov 2021)	Mr Colin Skidmore (Consultant)	AIG	Member
Tunkillia Exploration Results (after 15 Nov 2021)	Mr Marc Twining (Employee)	AusIMM	Member
Tunkillia Mineral Resource	Mr Ian Taylor (Consultant)	AusIMM	Fellow
Challenger Mineral Resource (above 215mRL)	Mr Ian Taylor (Consultant)	AusIMM	Fellow
Challenger Mineral Resource (below 90mRL)	Mr Dale Sims	AusIMM / AIG	Fellow / Member
Wudinna Mineral Resource (Clarke Deposit)	Ms Justine Tracey	AusIMM	Member
Wudinna Mineral Resource (all other Deposits)	Mrs Christine Standing	AusIMM / AIG	Member / Member

The information relating to historic Exploration Results and Mineral Resources in this announcement is extracted from the Company's Prospectus dated 14 May 2021 or as otherwise noted in this announcement, available from the Company's website at <a href="https://www.bartongold.com.au">www.bartongold.com.au</a> or on the ASX website <a href="https://www.asx.com.au">www.asx.com.au</a>. The Company confirms that it is not aware of any new information or data that materially affects the Exploration Results and Mineral Resource information included in previous announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates, and any production targets and forecast financial information derived from the production targets, continue to apply and have not materially changed. The Company confirms that the form and context in which the applicable Competent Persons' findings are presented have not been materially modified from the previous announcements.

### **Cautionary Statement Regarding Forward-Looking Information**

This document may contain forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "expect", "target" and "intend" and statements than an event or result "may", "will", "should", "could", or "might" occur or be achieved and other similar expressions. Forward-looking information is subject to business, legal and economic risks and uncertainties and other factors that could cause actual results to differ materially from those contained in forward-looking statements. Such factors include, among other things, risks relating to property interests, the global economic climate, commodity prices, sovereign and legal risks, and environmental risks. Forward-looking statements are based upon estimates and opinions at the date the statements are made. Barton undertakes no obligation to update these forward-looking statements for events or circumstances that occur subsequent to such dates or to update or keep current any of the information contained herein. Any estimates or projections as to events that may occur in the future (including projections of revenue, expense, net income and performance) are based upon the best judgment of Barton from information available as of the date of this document. There is no guarantee that any of these estimates or projections will be achieved. Actual results will vary from the projections and such variations may be material. Nothing contained herein is, or shall be relied upon as, a promise or representation as to the past or future. Any reliance placed by the reader on this document, or on any forward-looking statement contained in or referred to in this document will be solely at the readers own risk, and readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof.

<sup>\*</sup> Refer to Barton Prospectus dated 14 May 2021 and ASX announcement dated 8 September 2025. Total Barton JORC (2012) Mineral Resources include 1,049koz Au (39.7Mt @ 0.82 g/t Au) in Indicated category and 1,186koz Au (40.2Mt @ 0.92 g/t Au) in Inferred category, and 3,070koz Ag (34.5Mt @ 2.80 g/t Ag) in Inferred category as a subset of Tunkillia gold JORC (2012) Mineral Resources.

### **JORC Table 1 - Challenger Gold Project**

### **Section 1 Sampling Techniques and Data**

sample recovery and grade and whether

sample bias may have occurred due to

preferential loss/gain of fine/coarse

material.

#### Criteria Commentary Sampling techniques Challenger open pit and underground resources Nature and quality of sampling (e.g. cut All primary samples used in the estimate are from diamond drilling and included chip channels, random chips, or specific sampling and sludge drilling where available. specialised industry standard measurement tools appropriate to the Core has been whole core sampled for UG BQ drilling or half core sampled for NQ surface minerals under investigation, such as drilling. The sample volume for the half NQ sample is approximately 13% lower than the down hole gamma sondes, or handheld whole core BQ sample. Face samples weigh between 2 and 5 kg. Sludge samples are XRF instruments, etc.). These examples collected from 78 mm open production holes. The open hole is capped by the stuffing box should not be taken as limiting the broad of the sludge rig, allowing for sample collection. meaning of sampling. No second half core sampling or other formal sampling imprecision work on primary Include reference to measures taken to sampling has been undertaken. Primary samples are not weighed. ensure sample representivity and the appropriate calibration of any The deposit contains particulate gold and has a high level of imprecision in the data based on duplicate crushed material subsampling results in work undertaken by the onsite measurement tools or systems used. laboratory. Aspects of the determination of mineralisation that are Material to the Based on the current nature of the drillhole assay data and its distribution/location the Public Report. In cases where 'industry models produced can only be used for a global estimate and are suitable for Scoping level standard' work has been done this would Studies. It is considered that for better local estimation larger primary sample volumes are be relatively simple (e.g. "RC drilling was required given the particulate gold present in the deposit (whole HQ core or UG RC drilling). used to obtain 1 m samples from which 3 Face chip and open hole percussion 'sludge' samples have been collected for grade control kg was pulverised to produce a 30 g during the mine's operation. Analysis of their subsampling and analytical imprecision charge for fire assay"). In other cases, indicates they have similar imprecision to DDH data. There is no sampling QAQC data from more explanation may be required, such chip sampling or sludge drilling, yet they have been included to increase the number of as where there is coarse gold that has available samples for interpolation given sampling and assay imprecision in the data. inherent sampling problems. Unusual commodities or mineralisation types (e.g. Tailings Storage Facilities (TSF's) submarine nodules) may warrant Aircore (AC) &/or reverse circulation (RC) drilling was used to obtain 1m samples from disclosure of detailed information which nominal 7kg (AC) or 20kg (RC) samples were obtained, to derive a 40g charge for fire assay analysis of gold. **Drilling techniques** Challenger open pit and underground resources Drill type (e.g. core, RC, open-hole Diamond drilling data used is dominantly whole core BQ /LTK48 with some half core NQ hammer, rotary air blast, auger, Bangka, drilling in surface holes. Sparce surface holes are the only data below ~70RL. sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth Oriented core has not been used in underground drilling. Surface drilling has been oriented of diamond tails, face-sampling bit or with a spear technique, but the data was not available for this work. other type, whether core is oriented and All surface drilling has been single shot electronic surveyed on 30m nominal intervals. if so, by what method, etc.). Sludge drilling was a routine grade control process and utilised a converted underground blasthole rig drilling 76mm diameter holes. Holes were drilled through a collar stuffing box established within an oversize collar hole. Samples were collected into a rotating sample bag holder below the stuffing box outlet. Sample weights were not collected. Sludge holes were dominantly steeply inclined into the backs of the drives. Tailings Storage Facilities (TSF's) AC & RC drilling was undertaken on TSF1 to derive samples for assaying and metallurgical investigations. AC drilling only was undertaken on TSF2. **Drill sample recovery** Challenger open pit and underground resources Method of recording and assessing core Recovery data was collected at the logging stage with core loss logged as a specific and chip sample recoveries and results lithology. assessed. The gneissic host rock and gold bearing quartz veining is very competent and core loss is Measures taken to maximise sample not significant based on a review of the database and core photos from past underground recovery and ensure representative and surface drilling. nature of the samples. Whether a relationship exists between

average grade in the database is 3 g/t Au

As loss is a logged interval, it is not assayed as no sample exists in total loss zones. Where

No relationship between grade and recovery has been identified in previous work.

core loss resulted in poor core (low RQD) assays do occur in core loss affected intervals the

Criteria	Commentary  Tailings Storage Facilities (TSF's)					
	Drilling recoveries were qualitatively described for each drilled interval in the field database					
	along with an estimation of moisture content. Poor recovery was generally confined to (waste rock) sheeting above TSF1.					
	No relationship between grade and recovery has been identified in previous work.					
Logging	Challenger open pit and underground resources					
Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All drill core is geologically (lithology, mineralisation, structure) and geotechnically (Q-system) logged down to cm-scale (for fine structures). Any leucosome greater than 0.20m in length is recorded as a separate lithology. The logging is quantitative in nature as lithology percentages and compositions are recorded and all geotechnical logging relies on measurements for calculation of Q.					
Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.  The total length and percentage of the	All RC samples have a portion washed and placed into a chip tray for logging. This logging comprises qualitative geological records (lithology and mineralisation) on a sample scale (generally 1 m samples).					
relevant intersections logged.	All Sludge samples have a portion washed and placed into a chip tray for logging. This logging comprises qualitative geological records (lithology and mineralisation) on a sample scale (generally 0.75-0.90m samples). As sludge drilling was done as a part of the production cycle, the chips were retained for a maximum of six months (the maximum 'life cycle' of any particular stope block) before being discarded. No photographs are retained of the sludge chips.					
	Tailings Storage Facilities (TSF's)					
	Barton Gold Aircore drilling of tailings facility material was not logged.					
	All Barton Gold RC drilling of tailings facility material (TSF1) was electronically logged for lithology, weathering and colour. Metre-by metre samples are stored in chip trays which are photographed and electronically stored. Data is stored in an MS Access database.					
Subsampling techniques and sample	Challenger open pit and underground resources					
preparation If core, whether cut or sawn and whether	The full dataset is used (diamond drilling samples plus chip and sludge samples).					
quarter, half or all core taken If non-core, whether riffled, tube	Core has been whole core sampled for UG BQ drilling or half core sampled for NQ2 surface drilling. The sample volume for either sample is approximately equal.					
sampled, rotary split, etc. and whether sampled wet or dry.	No second half core sampling or other formal sampling imprecision work on primary sampling has been undertaken.					
For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The deposit contains particulate gold and has a high level of imprecision in the assay data based on duplicate crushed material subsampling results from work undertaken by the onsite laboratory.					
Quality control procedures adopted for all subsampling stages to maximise	onsite laboratory.					
representivity of samples.	Tailings Storage Facilities (TSF's)					
Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance	AC samples were collected from the drill rig cyclone and passed through a 3-tier riffle splitter to derive 1m samples between 1-2kg in weight.					
results for field duplicate/second-half sampling.	RC samples were derived from a cone splitter mounted beneath the cyclone to produce samples weighing approximately 1-2kg.					
Whether sample sizes are appropriate to the grain size of the material being	The majority of samples (>97%) from all TSF drilling were dry.					
sampled.	Duplicate samples were routinely collected for both AC and RC drilling utilising the sample splitting methods.					
Quality of assay data and laboratory	Challenger open pit and underground resources					
tests The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All sample types at Challenger are assayed on-site using the PAL1000 process which uses accelerated Cn leaching of a ~400 g crushed aliquot during pulverisation within a steel flask using grinding media plus an accelerant tablet. This technique has been applied due to the recognised high nugget of the deposit yet yields imprecise and at times biased data.					
For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the	Primary samples are crushed to -10mm top size then rotary sample divided (RSD) to produce the flask charge. The resultant slurry is subsampled to ~100 ml and centrifuged with the leachate then diluted and read for Au via an AAS instrument.					
analysis including instrument make and	As only leachable gold is recovered in the process the method is considered 'partial'					

although no indications of refractory/nonleachable Au were reported or recognised over

model, reading times, calibrations factors

the mine life.

applied and their derivation, etc.

#### Criteria

Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.

### Commentary

Duplicate samples (1:25) indicate a high level of imprecision and bias in the primary assay vs duplicate. The bias is thought to be due to poor subsampling practices where operators hand grab material circumventing the effective working of the RSD.

CRM materials also run through the process indicate sporadic accuracy issues and blanks indicate a level of material carry over between flask charges can occur in the process.

External fire assay (FA) checks indicate an overall bias between PAL1000 data and external lab data where original PAL data is biased high compared to FA data. This is thought to be largely due to the larger charge size better capturing the nuggety gold (~400 g v 50 g). Biases in subsampling errors when obtaining the check samples from crushed residues should also be considered.

#### Tailings Storage Facilities (TSF's)

1-2kg splits were sent to Bureau Veritas in Adelaide for preparation and analysis using a fire assay technique for gold. Bureau Veritas' FA1 method uses a 40g lead collection fire assay with AAS finish to a 0.01 ppm detection limit.

Barton Gold's RC and AC programs includes a comprehensive QAQC component with Field Duplicate samples taken at intervals of every 50<sup>th</sup> sample; Certified Standards (selection of OREAS CRM's considered most appropriate for expected grade and composition) were inserted at frequencies of every 50th sample submitted; blanks inserted in sequence at every 50th sample submitted. Additionally, the laboratories provided their internal QAQC which included check samples, CRM's, blanks and repeats.

No geophysical studies were used in the course of Barton Gold drilling programs.

#### Verification of sampling and assaying

The verification of significant intersections by either independent or alternative company personnel.

The use of twinned holes.

Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.

Discuss any adjustment to assay data.

#### Challenger open pit and underground resources

PAL1000 assays are duplicated during the primary batch at 1:25 (termed R1 assays) but are also duplicated on request (termed R2 assays) to verify assays over 2 g/t Au. R2 sample requests also include flanking intervals. Analysis of original assay / R1 and original assay / R2 paired data for the Challenger Deeps area indicates original samples are around 7% higher grade on average than R1 duplicates and 13% higher than R2 duplicates. These biases are believed to come from improper subsampling where hand grabbing of duplicate 'splits' from crushed residue bags reduces fines content.

Imprecision is a material issue for the data as is relatively small aliquot in the PAL1000 compare to the 'industry standard' of total sample preparation by pulverising mill. The verification of specific significant intersections is difficult in this high nugget environment where 50-60% of gold is recovered in the gravity circuit.

No holes within Challenger Mine are twinned, data processing and management uses an access database.

#### Tailings Storage Facilities (TSF's)

Four AC holes were twinned with RC on TSF1, with 73 sample pairs show a good correlation between drilling methods. RC results returned a +ve bias in samples less than 0.8 g/t and AC assays returned a +ve bias in samples above 0.8 g/t with all quantiles within 10% error bars.

Significant intersections were reviewed and verified by alternative company personnel.

#### Location of data points

Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.

Specification of the grid system used. Quality and adequacy of topographic control.

#### Challenger open pit and underground resources

All drillhole collars have been surveyed in by site surveyors using total station equipment. Underground drilling has used the mine survey control system to establish drill hole, sludge and chip sample location.

Surface drilling within Challenger Deeps has hole lengths of 1500-1600m. Survey errors in long holes compound creating locational uncertainty particularly critical for narrow lode deposits such as at Challenger. This locational uncertainty can impact confidence in interpretation where lode intercepts cannot be confidently correlated over long distances/depths.

Data is located within a metric grid based on the surveyed mine coordinate system. For grid conversion see the prior public report (2017 resource statement, local -> AMG).

Topographic control is not critical in this environment as the terrain is very flat and the site under survey control due to mining activity / statutory requirements.

Criteria	Commentary							
	Tailings Stora	ge Facilities (T						
		ns for TSF drill the GDA94 (EPS			differential G	GPS utilising U	JTM co-	
	Challenger Mine Reduced Level (RL) = AHD + 1000m so AHD 193m level = 1193mRL.							
	Transformations between AMG84 (EPSG:20353) and local grids: origin, azimuth							
	AMG origin and	d azimuth conve	rsions are based	on the follow	ing coinciding	points.		
	AMG84 (EPSG:20353) Co-ordinates Challenger Mine Grid							
	Station Name	mN	mE	mAHD	mN	mE	mRL	
	CH10	6693784.890	363338.265	194.977	10524.890	19860.005	1194.977	
	CH20	6693917.900	363657.477	50.069	10499.951	20204.989	1050.069	
	Origin	6693379.301	363699.494	194.410	10000.000	20000.000	1194.410	
	Flat Battery	6693411.735	363510.463	194.314	10114.083	19845.777	1194.314	
		ne Grid North 0°						
	Challenger Mir (EPSG:20353)	ne Grid North 0° : bearing)	= 333° 14′41″ AI	MG84 (EPSG:2	20353) (grid be	earing + 26°45	'19" = AMG84	
	Challenger Mir	ne Grid 31° = Ma	gnetic North 0°					
Data spacing and distribution	Challenger or	pen pit and und	derground reso	ources				
Data spacing for reporting of Exploration					gonoral signi	ficantly loss i	n tho	
Results.		in the resource eeps (former) r			-	•		
Whether the data spacing and distribution is sufficient to establish the	areas. Diamo	nd drilling is or	n a nominal 20	-25m vertica	al x 10-15m h	orizontal grid	d while chip	
degree of geological and grade continuity		its on most fac up-hole rings a		idewalls on 3	3m intervals.	Sludge drillir	ng is on 10-	
appropriate for the Mineral Resource and		ervals has been		m in diamor	ad drilling an	d face chine	while cludge	
Ore Reserve estimation procedure(s) and classifications applied.		een sampled o	•		na ariiing an	d race chips v	wille sludge	
Whether sample compositing has been applied.	Tailings Stora	ge Facilities (T	SF's)					
арриса.	Drill holes for evaluating the TSFs were undertaken on an equidimensional 50m x 50m spacing which is considered appropriate for the style of mineralisation contained with the TSF's.							
	No sample co	mpositing has	been applied.					
		, ,						
Orientation of data in relation to	Challenger or	pen pit and und	derground reso	ources				
geological structure		ling platforms	_		and so high	lv skewed an	gles can	
Whether the orientation of sampling achieves unbiased sampling of possible		n the drillhole						
structures and the extent to which this is known, considering the deposit type.	-	illhole intercep		nant areas ar	e at high ang	gles to the lo	des and so	
If the relationship between the drilling				e trends give	an drives foll	ow the oreho	ndy Wall	
orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this	Face sampling is ideally located across lode trends given drives follow the orebody. Wall sampling and sludge drilling is less optimally oriented often located along or parallel to the structure and its boundaries. All lode models were primarily developed on drilling data with local adjustments made using sub-optimally oriented data where required.							
should be assessed and reported if material.	Lode trends are well established from mining activity on the levels above and below and interpretation. In general, the lode boundary models show a high level of geological							
	continuity and the shoots are strongly anisotropic.  Tailings Storage Facilities (TSF's)							
	Mineralisation in the TSFs follows sedimentary depositional processes and vertical drilling suitably achieves unbiased sampling.							
Sample security	-	pen pit and und		ources				
The measures taken to ensure sample security.	Samples were	e not transport	ed off site for	analysis, so				
		e submission page Facilities (T		used for all	batches subr	nitted to the	onsite lab.	
	14153 31014	ac i demilies (1.	<u> 1</u>					

Criteria	Commentary
	Barton Gold staff oversaw the sampling on the AC &RC drill rigs and maintained oversight of sample security whilst onsite during the drilling programs. Split samples were inserted into pre-printed calico bags. These tied bags were, in batches of 5, ziplocked into labelled polyweave bags which were inserted into Bulka-bags. The bulka bags were strapped onto pallets and either transported and delivered to the laboratory by Barton Gold personnel or loaded by a Barton Gold representative on to a semitrailer for transport to the laboratories in Adelaide. The trailers were not unloaded whilst in transit.
Audits or reviews The results of any audits or reviews of sampling techniques and data	Challenger open pit and underground resources  A review of the operation in 2018 by SRK Consulting found no concerns with assay data  Tailings Storage Facilities (TSF's)  Sampling techniques and data was reviewed by the independent consultant in the preparation of a Mineral Resource Estimate using the TSF data sets.

## **Section 2 Reporting of Exploration Results**

Criteria	Commentary
Mineral tenement and land tenure	All Challenger mineral resources are contained within ML6103 and ML6457 ("Challenger
status Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding	Deeps", not reported in this release). The Mining Leases (ML's) are held 100% by a wholly-owned subsidiary company of Barton Gold Holdings Ltd (Barton). The Mining Lease is covered by a registered Native Title determination held by the Antakirinja Matu-Yankunytjatjara Aboriginal Corporation (AMYAC. AMYAC have the benefit of a production royalty for gold produced from the Challenger ML's.
royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Challenger tenements lie within the Mobella pastoral lease. There are no conservation reserves or areas with elevated environmental value with the Challenger tenements.
The security of the tenure held at the time of reporting along with any known	The Challenger tenements lie with the Woomera Prohibited Area (WPA) and Barton maintains the required approvals to operate within the WPA.
impediments to obtaining a licence to operate in the area.	There are no known risks to the security of the Challenger tenements at the time of reporting and there are established statutory processes under the SA Mining Act to facilitate the renewal of the Challenger tenements at the end of their current terms. There are no known impediments to obtaining future licences.
Exploration done by other parties	Challenger open pit and underground resources
Acknowledgment and appraisal of exploration by other parties.	The data used for the estimation and reporting of mineral resources in this release was produced by the various operators of the Challenger Gold Mine since its discovery in 1995 and operations between 2002-2018, prior to being placed under care and maintenance. The data has been appraised as fit for purpose with relevant commentary contained within these JORC tables.
	Tailings Storage Facilities (TSF's)
	No previous appraisal of the TSF's has previously been undertaken.
Geology	Challenger open pit and underground resources
Deposit type, geological setting and style of mineralisation.	Challenger occurs within the Mulgathing Complex of the Gawler Craton and the area is characterized by Archaean to mid-Proterozoic gneissic country rock. Original granulite facies metamorphism is overlaid by retrograde amphibolite facies recrystallization around 1650 - 1540 Ma (Tomkins, 2002). Saprolitic clays extended to 50 m depth within the ore zone, reflecting a deeper base of oxidation.
	High-grade gold mineralisation is associated with coarse-grained quartz veins with feldspar, cordierite and sulphides dominated by arsenopyrite (and related löllingite), pyrrhotite and lesser telluride. These veins are interpreted as migmatites that have undergone partial melting, with this melting reflecting a precursor hydrothermal alteration event (McFarlane, Mavrogenes and Tomkins, 2007).
	Three main types of leucosome/vein styles have been defined:
	1. quartz dominant veins, which may be remnant premetamorphic mineralised veins
	2. polysilicate veins, which are dominant in the main ore zones and host the majority of the mineralisation
	3. pegmatitic veins, which are unmineralised, late stage, with cross-cutting relationships.
	The gold mineralisation is structurally controlled through emplacement of the partial melt into relatively low-strain positions. McFarlane, Mavrogenes and Tomkins (2007), using Monazite geochronology proposed a 40 Ma period between 2460 and 2420 Ma of repeated high-temperature events.
	The Challenger Structure can be defined as a laterally extensive shear zone with shoots that plunge 30° to 029° (AMG). These ore shoots are defined by leucosome veins, which are characteristically ptygmatically folded. The small-scale folding is parasitic to the overall larger scale folding that can be interpreted from drill core. The folding is interpreted as prepeak metamorphism along with gold mineralisation. Post-folding, the Challenger shoots were subjected to extreme WNW-ESE shortening and extension directed shallowly to the NE.
	Reference:
	Androvic, P, Bamford, P, Curtis, J, Derwent, K, Giles, A, Gobert, R, Hampton, S, Heydari, M, Kopeap, P and Sperring, P, 2013. Challenger Gold Mine, Australasian Mining and Metallurgical Operating Practices, AuslMM. 1097-1112.

Critoria	Commentary
Criteria	Commentary
	Tailings Storage Facilities (TSF's)
	TSF1 comprises material derived entirely from the Challenger main pit and initial underground workings. TSF2 is predominantly comprised of material derived from Challenger underground ore, with the upper 3m comprising co-processed material from the Perseverance Mine at Tarcoola, located approximately 130km to the SE of the Challenger Mine.
	Tailings volume estimations were derived from surveyor records. TSF1 hosts a higher-grade outer ring in the upper part of the dam ("beach" facies), with gold grades exceeding 0.7 g/t Au, while the inner upper and lower layers ("pond facies") range between 0.3 and 0.5 g/t Au. The lower proportion of TSF2 exhibits grades broadly consistent with the lower-grade material from the central upper part of TSF1 and is overlain by tailings with approximately 0.2 g/t Au.
Drillhole information	Challenger open pit and underground resources
A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material	The drilling results referred to in this release relate to an existing mining area with extensive previous drilling. All previous drilling relevant to providing material context to the current estimate have been used. No new exploration results relating to the Challenger mine deposits are reported in this release.
drillholes:	Tailings Storage Facilities (TSF's)
<ul> <li>Easting and northing of the drillhole collar</li> <li>Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drillhole collar</li> <li>Dip and azimuth of the hole</li> <li>Downhole length and interception depth hole length.</li> <li>If the exclusion of this information is</li> </ul>	Drill collars for the AC and RC drilling reported in this release are provided in Table 1, appended to this release.
justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly	
explain why this is the case.  Data aggregation methods	Challenger open pit and underground resources
In reporting Exploration Results, weighting averaging techniques,	Samples are commonly collected on 1 m intervals, Down hole sample intervals were composited to one metre lengths (length weighted).
maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material	High grade outliers were determined for each estimation domain, and threshold caps were applied.
and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and	Two extreme high-grade outliers were quarantined before grade capping analysis, the resulting top cut determined was applied to all samples (including the quarantined samples).
longer lengths of low grade results, the procedure used for such aggregation	No metal equivalents were calculated.
should be stated and some typical	Tailings Storage Facilities (TSF's)
examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results for the TSF's reported in this release are reported as primary intervals with a cut-off grade of 0.1g/t Au and allowing for up to two consecutive metres of internal dilution. Significant intervals included with the primary intersections are reported to a cut-off grade of 0.5g/t Au. Additionally, intervals greater than 1.0g/t Au are also reported to convey areas of highest grades returned from within the TSF's.
	Gram-metre accumulations (ie the product of gold grade (g/t) and thickness (m) are reported for all primary reported intervals and related significant sub-set intervals.
	All intervals are reported as simple averages or as weighted averages where uneven sample lengths are present (specifically, the bottom of hole intervals in TSF2 which were often <1m).
	Results for the AC drilling completed across TSF1 have not been reported given that a duplicate program of RC drilling was completed across TSF1 and produced results that were materially the same as the AC derived data set and of higher confidence on the basis of having being derived from larger primary samples. Statistical analysis and comparison was

Criteria	Commentary
	undertaken between the two data sets (ie AC vs RC) which supports this position (refer to Section 1 of this JORC table under the heading "Verification of Sampling and Assaying").
Relationship between mineralisation widths and intercept lengths  These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Challenger open pit and underground resources  The geometry of the mineralisation is well understood. Drill hole angles relative to known mineralisation is highly variable due to the constrained nature of underground drilling. Underground drill fans from predetermined drill cuddies offer a variety of drill intercept angles. A 3D interpretation honouring the drill holes (snapped to drill holes) is the only suitable option.  Tailings Storage Facilities (TSF's)  The vertical drilling on the TSF's accurately reflects the true thickness of mineralisation.
Diagrams Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	See Figures included the body of this Announcement. Relevant commentary relating to diagrams is discussed under the heading of Balanced Reporting.
Balanced reporting Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No exploration results are reported.
Other substantive exploration data Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Challenger open pit and underground resources  No substantive exploration data not already mentioned in this table has been used in the preparation of this Announcement. The Challenger Mine was successfully operated by CGO various operators between 2002- 2018.  There are extensive geological, geophysical, geochemical, geotechnical and metallurgical datasets available for this project area.  Tailings Storage Facilities (TSF's)  Preliminary but comprehensive metallurgical test work was undertaken on three composite samples derived from TSF1. The purpose of the test work was to establish the amenability of the (residual) gold mineralisation contained within the TSFs to future economic extraction.  The three composite samples represented the three broad domains interpreted within TSF1 (figure 7 of this release):  1. A broad lower domain comprising approximately the lower half of TSF1 and comprising material derived from mining oxide and transitional material from the original open pit at Challenger.  2. A higher-grade outer ring of material representing material derived from the processing of high-grade underground ore and being coarser in nature.  3. A lower-grade, finer grained inner pond of material, representing the finer material that didn't readily settle out upon discharge into the TSF.  The sample material used for compositing the metallurgical samples was sourced from the
	AC drilling program on TSF1. 100% of residual drill cuttings contributed to the two domains representing the upper half of TSF1 whilst 50% of residual drill cuttings were used to represent the single lower domain in TSF1. The contributing samples from the lower domain were spaced evenly across that domain.  The majority of material in TSF2 is interpreted as being similar in character to the upper, inner-pond material in TSF1. The upper 3m of TSF2 represents tailing produced by the coprocessing at the Central Gawler Mill of ore from the Perseverance Mine at Tarcoola.

Criteria	Commentary
	The range of tests included particle size analysis, cyanide leach testing, sequential and diagnostic leach testing, gravity recovery, mineralogical assessment and grinding-power analysis.
	The results of these analyses suggest that gold recoveries of up to ~70% should be attainable with further grinding to 38um particle size, which should also be attainable with the existing ball mill infrastructure currently installed at the Central Gawler Mill.
	Bulk density was determined empirically by an acquisition program of 14 soft sediment cores (spread widely from across TSF2) which were collected and analysed to determine dry weights and corresponding volumes to calculate dry bulk densities.
Further work	Challenger open pit and underground resources
The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out	Further work is required to expand the resource model to cover the existing mine workings beneath 900mRL
drilling).	<u>Tailings Storage Facilities (TSF's)</u>
Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is	Further metallurgical test work is required to refine and optimise the initial test results to determine the optimal processing workflow.
not commercially sensitive.	

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Challenger open pit and underground resources
Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.  Data validation procedures used.	Logging data is recorded on laptops and transferred to the access database with validation steps by the geology department. Similarly, digital assay files are also transferred internally from the onsite, in-house laboratory then loaded and validated by the geology department.
	Written data validation procedures were not sighted. The mine was in operation for over 13 years with established procedures for data management.
	Tailings Storage Facilities (TSF's)
	The database is currently managed by the Barton Gold using MS Access. There is no historical drilling data pertaining to the TSFs.
	Basic database validation checks were run, including collar locations, drill holes plot on topography, checks for missing intervals, overlapping intervals and hole depth mismatches.
Site visits	No site visit has been undertaken by the CP.
Comment on any site visits undertaken by	The project is well established, with a long history of mining
the Competent Person and the outcome of those visits.	The site visit of previous independent CP's is relied upon.
If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Challenger open pit and underground resources
Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The lode arrangement, trends, continuity, and models are interpreted using understanding from prior experience mining the deposit on the levels above and/or below.
Nature of the data used and of any assumptions made.	Lodes were modelled on diamond drilling data with significant adjustment to account for face chip and sludge data.
The effect, if any, of alternative interpretations on Mineral Resource estimation.  The use of geology in guiding and controlling Mineral Resource estimation.  The factors affecting continuity both of grade and geology.	The constraining lodes for the mineralisation have proved to be extremely continuous on a broad scale due to the highly dominant structural control on the deposit. The shoots have been mined or traced for over 2,400 m down plunge and across a major fault offset (215 level fault) yet the distribution of grade within lodes is considered difficult to model (high Coefficient of variations within individual lodes) and predict locally based on diamond and sludge drilling data; this is attributed to the high nugget of the mineralisation and subsequent sampling and assay data imprecision.
grade and geology.	Lode models were based on a combination of geology and grade data.
	The approach was to model the structure across its full width and not sub-domained into higher grade intervals or shoots within the structure. The sampling and assay imprecision requires a 'whole of structure' approach as modelling discrete high-grade zones will likely overstate high grade continuity and hence Au metal. Consideration was given to the width and extents of observed shoots; search ellipses and the number of informing samples were restricted to reflect trends in the raw data.
	Within each modelled structure, natural breaks in mineralisation could be observed and several sub-domains were defined between these consistent low grades breaks within the larger structural domain. M1 is one continuous lode, M2 has 16 sub domains, M3 has 12 sub domains and SE Zone has 4 Sub domain areas. West lode has eight sub domains and SW has one low grade and one higher grade sub domain.
	Once the lode envelopes were modelled grades were then estimated within the domain using the lode envelope as a hard boundary constraint with a trend based on the lodes local geometry to guide anisotropy (dynamic anisotropy). Sample grades across the modelled contact shows a sharp contact between very weakly mineralised country rock. The lodes boundaries and the 0.5 g/t Au grade threshold is considered appropriate for mineralised lode definition in preference to a higher threshold.
	Two sets of Barren dykes, mafic and lamprophyre, cross-cut the lodes have been removed from the resource classification.
	Tailings Storage Facilities (TSF's)
	The geological characteristics of the TSFs are previously described under the Geology heading of Section 2: Reporting of Exploration Results.
Dimensions	Challenger open pit and underground resources
The extent and variability of the Mineral Resource expressed as length	The areas of interest include lodes which variably extend from the top of fresh rock near surface down to the 215 level (215 mRL), a minor offsetting structure in the deposit. The

Criteria	Commentary
(along strike or otherwise), plan width,	structural lodes continue and have been mined down to below the 215 fault (a major
and depth below surface to the upper and lower limits of the Mineral Resource.	offsetting structure), This area is considered to be the Challenger Deeps lodes and are known to extend 600 m down plunge with a further 360 m of lode interpreted to extend below to base of mining
	Tailings Storage Facilities (TSF's)
	TSF1 has a footprint at the upper surface of approximately 370m diameter and is equidimensional. TSF2 has an irregular shape and forms part of an integrated landform with the adjacent TSF1 and waste rock facilities. It has a long axis length of approximately 550m at surface (NW-SE) and orthogonal width to this of approximately 500m at surface (NE-SW).
	The thickness of tailings in TSF1 ranges from 17m-21m, noting there is a 2m capping of waste rock emplaced on top of the TSF as part of previous site remediation work.
	The thickness of tailings in TSF2 ranges from ~14-17m. There is no capping on TSF2.
	The rock constructed access is removed from the estimated volumes.
	Both TSF facility had central decant wells installed during their construction with access provided by a rock-constructed access way.
Estimation and modelling techniques	Grades estimation is by Ordinary Kriging constrained by wireframe models of the lodes.
In the case of block model interpolation, the block size in relation to the average	Input data is a combined DDH, sludge and chip sampling database for the estimates above the 215 mRL.
sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.	Sample length was standardised (composited) at 1m however sample diameter/volume varies within and between the data types.
Any assumptions about correlation between variables.	Extreme sample grades were removed from the outlier analysis, outliers and extreme samples were controlled via top cutting / capping
Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using	No cut-off grade was applied to the estimation of the TSF mineral resource as it is assumed hydraulic mining methods will be deployed which will result in all material being mined and processed. Accordingly, there are no bounding limits to the mineral resource other than the bounding structure of the TSF's
grade cutting or capping.  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Data imprecision, spacing and lode interpretation / location at depth due to sparse data and potential survey error remain major uncertainties in the estimates.
	Modelling of domains was undertaken in Leapfrog and spatial analysis and grade estimation undertaken in Surpac.
	Sample length was standardised (composited) at 1m however
Moisture Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture.	Tonnages are based on dry tonnes. Dry bulk density has been assigned to the host rocks.
Cut-off parameters	Challenger open pit and underground resources
The basis of the adopted cut-off grade(s) or quality parameters applied.	The resource is reported above a 0.5 g/t Au lower cut-off. Considering likely open pit mining, conventional heap leach or CIL processing and administration costs a head grade of 0.50 g/t is assumed profitable.
	Key Assumptions:
	<ul> <li>1.4 m minimum mining width (2 x sub block width),</li> <li>Open Pit Mining and Processing cost of AUD\$30.86/tonne for mineralised material.</li> <li>Underground Mining and Process cost of AUD \$125/tonne for mineralised material.</li> <li>Mining and Process cost of AUD \$13/tonne for tailings.</li> <li>Gold price AUD 5,500/oz</li> <li>94% Metallurgical recovery from hard rock</li> <li>70% Metallurgical recovery of tailings</li> <li>5.0% Dilution Open Pit, 15% Dilution Undergound</li> <li>6.0% Royalty</li> <li>These assumptions are in line with costs used in the Tunkillia Scoping Study, reported previously by Barton Gold in 2025.</li> </ul>
	Tailings Storage Facilities (TSF's)
	A bulk density value of 1.5t/m³ was assigned to the TSF resource models. Bulk density was determined empirically by an acquisition program of 14 soft sediment cores (spread widely

Criteria	Commentary
	from across TSF2) which were collected and analysed to determine dry weights and corresponding volumes to calculate dry bulk densities.
Mining factors or assumptions	Challenger open pit and underground resources
Assumptions made regarding possible	No mining factors or assumptions have been applied to the resource.
mining methods, minimum mining dimensions and internal (or, if applicable,	MA considers the near surface Challenger project amenable to open pit mining methods
external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider	and assumes the likely mining scenario will have 5 m benches and 2.5 m flitches. Below the potential open pit, access to the deposit is via rehabilitated decline. The mine has been dewatered down to the 300 level. These assumptions have influenced, composite length, block size and resource cut off parameters.
potential mining methods, but the assumptions made regarding mining	<u>Tailings Storage Facilities (TSF's)</u>
methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Hydraulic mining methods have been assumed for the future mining of the TSF resources. Hydraulic mining is largely non-selective and it is assumed all TSF material will be extracted
Metallurgical factors or assumptions	Challenger open pit and underground resources
The basis for assumptions or predictions	No metallurgical factors have been applied to the in-situ grade estimates.
regarding metallurgical amenability. It is always necessary as part of the process	Metallurgical Recovery is assumed, and a 95% gold recovery is used in the reasonable
of determining reasonable prospects for eventual economic extraction to consider	prospects of economic extraction analysis, no account of silver recovery is considered.
potential metallurgical methods, but the	Tailings Storage Facilities (TSF's)
assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the	Barton commissioned Pitch Black group to determine the recovery potential of the contained gold whilst also assessing the impact of potentially deleterious elements within the dormant tailings storage facilities. (Challenger TSF Metallurgical Test Work Report, Apr 2025) Recovery was determined to be 70% at a 38µm grind.
metallurgical assumptions made.  Environmental factors or assumptions  Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The Challenger Project has been the subject of past historic mining and mineral processing activities on site. Environmental baseline mapping has not identified any matters that are likely to preclude the future development of a mining operation that requires the on-site management of wastes and process residues (waste rock and process tailings). The consideration of a conventional open-cut/underground mining and CIP gold processing operation, including associated ancillary activities and stand-alone infrastructure, fits with the scope of the South Australian government's approval frameworks and processes for a project such as the Challenger Project.
Bulk Density	Challenger open pit and underground resources
Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.  The bulk density for bulk material must	Bulk Density (BD) of material at Challenger Gold Mine has been determined in two phases. The initial BD value for the Challenger rock mass was determined during the mine feasibilit study, based on core samples from 1,200 to 1,090 mRL and was determined to be 2.72 for the Christie Gneiss, which comprises the Challenger deposit. A second pass of SG calculations were conducted in 2012 to determine if the SG had changed with depth. 158 samples were taken from the 320 to 240 mRL levels of both Gneiss and intrusive materials As the host rocks of the Challenger deposit do not have any voids or variation in moisture
have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences	content, these factors have not been taken into account. It was found that the SGs at the base of the mine comprise:
between rock and alteration zones within	o Gneiss SG = 2.86
the deposit.	o Lamprophyre SG = 2.92

o Mafic SG = 2.91

	0
Criteria	Commentary
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	2017 resource statement reported past reconciliation tonnes for the mine to EOM April 2016 are 99% against the mill.
of the different materials.	It has been decided to apply:
	o Completely weathered 1.5 o Highly weathered 2.3
	o Moderately weathered 2.5
	o Slightly weathered 2.7
	o Fresh material 2.72
	Tailings Storage Facilities (TSF's)
	12 samples from 4 sites across TSF2 were used to determine bulk density with a value of 1.5t/m³ assigned to all the TSF materials. The bulk density values were derived empirically
	as described in Section 1 of this JORC table under the heading "Other substantive
	Exploration Data (bulk density)".
Classification	Challenger open pit and underground resources
The basis for the classification of the Mineral Resources into varying confidence categories.	Data distribution, development and estimation parameters along with the specific considerations below were used to determine resource classification.
Whether appropriate account has been	Indicated
taken of all relevant factors (ie relative	May be developed on one level only.
confidence in tonnage/grade estimations, reliability of input data, confidence in	<ul> <li>Does not have sufficient information to fully inform structural complexity, but shows lode presence (i.e. 25m spaced diamond drilling that cannot provide sufficient</li> </ul>
continuity of geology and metal values,	resolution to show up metre-scale parasitic folding).
quality, quantity and distribution of the data).	<ul> <li>Does not have sufficient information to fully inform lode continuity (i.e. spacing of drilling such that it is difficult to determine which intercepts are which part of the</li> </ul>
Whether the result appropriately reflects	system), but shows lode presence.
the Competent Person's view of the	Drillhole spacing typically 20 x 20m diamond drilling in conjunction with occasional 5
deposit.	to 10m ring spaced sludge drilling and face samples 3 to 4m apart.  Inferred
	Limited development had been undertaken adjacent to the resource.
	Sufficient information to infer the presence of a lode structure and assume grade
	continuity.  • Drillhole spacing not relevant as a single intercept, in conjunction with face sampling
	or sludge drilling and can be identified as part of the lode is used for the definition of the inferred resource.
	The extensive use of face and sludge data has resulted in significant proportions of the estimate classified as Inferred Resources.
	Tailings Storage Facilities (TSF's)
	The TSF resource is classified as Indicated, based on a drill spacing of approximately 35 m x
	35 m. Grade distribution approximates a normal curve with low coefficients of variation, consistent with the expected homogenisation resulting from grade-controlled mill feed
	followed by grinding and processing a slurry through the CIL plant.
Audits or reviews The results of any audits or reviews of	There has been no independent audit of the data or mineral resources.
Mineral Resource estimates.	
Discussion of relative accuracy/confidence	No geostatistical confidence limits have been estimated. The relative accuracy and confidence in the Mineral Resource Estimate is reflected in the Resource Categories.
Where appropriate a statement of the	The ordinary kriging result, due to the high level of smoothing, should only be regarded as a
relative accuracy and confidence level in the Mineral Resource estimate using an	global estimate, and is suitable as a life of mine planning tool. Grade capping and tight
approach or procedure deemed	search ellipses were used to restrict the influence of high-grade composites.
appropriate by the Competent Person.	Inferred Mineral Resource has a lower level of confidence than that applying to an
For example, the application of statistical or geostatistical procedures to quantify	Indicated Mineral Resource and must not be converted to an Ore Reserve.
the relative accuracy of the resource	Should local estimates be required for detailed mine scheduling, the employment of techniques such as Uniform conditioning or conditional simulation should be considered,
within stated confidence limits, or, if such an approach is not deemed appropriate,	ultimately larger underground samples and grade control drilling is required.
a qualitative discussion of the factors	The Challenger Deposit was discovered in 1995 and mined from 2002 and 2018 producing
that could affect the relative accuracy and confidence of the estimate.	~1.2 Moz gold.
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Criteria	Commentary
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	